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UNITED STATES DEPARTMENT OF AGRICULTURE
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FOOD, FEED, AND SOUTHERN FARMS

A Study of Production in Relation to Farm Needs in the South

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FOREWORD

The problem of farm self-sufficiency has long been a vital concern of southern agricultural workers as well as southern farmers. Although a high degree of farm self-sufficiency is practiced in some parts of the Cotton Belt, the region generally is characterized by specialization in cash crops, principally cotton, and by an insufficient production of food and feed to provide adequately for farm and family needs. The income advantage of cotton over food and feed crops has been regarded by most farmers as a sufficient justification for the production of cash crops, although a considerable part of their food and feed had to be bought.

Much has been said and written concerning the low level of living and the inadequacy of the diets of some southern farm people. Diversification in production and greater farm self-sufficiency have been suggested as remedies. The production of food for home use is particularly important in the Cotton Belt because, generally, cash incomes are low. The money with which to buy food is limited, and the result may be inadequate or unbalanced diets unless some of the food is produced on the farm.

The low-income situation has been aggravated by relatively low prices for cotton and the lack of a substitute, or alternative cash enterprise, for cotton.

How best to use the land released from cotton production by the programs of the Agricultural Adjustment Administration is another problem that faces the southern farmers. The use of such land for the production of farm food and feed crops represents what may be a saving opportunity for these farmers.

Although the question of farm self-sufficiency is an old one, little research has been conducted as to its possibilities and limitations. Little is known, except in limited situations, concerning food-consumption habits of various segments of the southern farm population or of the production opportunities and limitations of these various segments. Nor is available much information regarding the economy of farm self-sufficiency versus specialization.

How self-sufficient are southern farm people in various areas with respect to commodities that are now grown on their farms? From a physical viewpoint, how self-sufficient could southern farmers be? As a first step toward answering these questions, a reconnaissance survey was conducted in 1938. This survey was a cooperative endeavor of the Bureau of Agricultural Economics, the Agricultural Adjustment Administration, and the extension services and experiment stations in eight States - South Carolina, Georgia, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, and Texas.

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SUMMARY AND CONCLUSIONS

(1) Southern farmers are now using a large proportion of their land for the production of food and feed for farm and home use. In 1937, farmers in South Carolina, Georgia, Alabama, Mississippi, Louisiana, Arkansas, Texas, and Oklahoma used about 27.8 million acres, or approximately 29 percent of their total cropland, in producing food products for home consumption and feed for farm workstock. Approximately 29 million acres of pasture land were grazed by workstock and by livestock used for farm food.

(2) The acreage so used is insufficient, however, to provide farm families with enough farm-grown products to meet the requirements for a minimum-adequate diet. If farmers in these States had consumed all of the farm-grown products they needed, an additional 5.8 million acres of cropland and 8.7 million acres of pasture would have been required in 1937.

(3) The acreage of cropland and pasture per capita of farm population is relatively small in the Cotton Belt generally. This, together with the need for cash, will probably restrict any great substitution of farm food and feed enterprises for cash-income enterprises. But many farmers can live better by producing more of their food and feed needs during slack periods when they are not busy with their cash-income crops. The release of land from cotton and other soil-depleting crops under the programs of the Agricultural Adjustment Administration is an added inducement for the production of farm food and feed.

(4) Many food items are produced in excess of farm-diet needs, particularly in truck, fruit, ranching, or other specialized areas from which food products normally are shipped out. But farmers in the South generally are not self-sufficing in those farm commodities that physical conditions allow them to produce.

(5) More cropland was used to produce feed for farm horses and mules in 1937 than was used in producing food for home consumption. The acreages used for these two purposes were approximately 15.4 and 12.5 million acres, respectively.

(6) Direct food-consumption crops would have to be increased from the 3.2 million acres computed as used in 1937 to 5.5 million acres - an increase of approximately 31 percent - if specified diet needs of adapted products were supplied.

(7) Total milk production per capita of farm population was in excess of diet needs in all States except South Carolina, Georgia, and Louisiana, whereas the average farm consumption of milk and milk products in all States was below the requirements for a minimum-adequate diet. This situation of sufficient production and inadequate farm consumption is explained by the sale of dairy products from farms where dairying is a commercial enterprise, and by the large number of other farms that keep no milk cows.

To provide the farm population with the dairy products needed for a minimum-adequate diet would require approximately 3.1 million cows. This total represents about 0.8 million, or approximately 31 percent, more cows than were used for this purpose in 1937. The cattle used to furnish products for home consumption in 1937 grazed an estimated 2.7 million acres of cropland and 15.2 million acres of pasture. The cattle needed to provide for diet needs would have required 4.1 million acres of cropland and 22.8 million acres of pasture land, respectively.

(8) Production of beef is considerably in excess of diet needs, but little beef is reported as slaughtered on farms. The difficulty of slaughtering and curing beef on farms, and the uneven geographic distribution of cattle are largely responsible for the low consumption of farm-slaughtered beef.

(9) Pork is the principal farm-produced meat consumed by farmers in the Southern States. Farm-slaughtered pork was in excess of diet needs in Georgia. In the other States, farmers consumed less of their pork production in 1937 than would have been necessary to meet diet needs. Had these home needs been met in the eight States that year, a total of 6.4 million head of hogs would have been required, instead of the 4.9 million head actually used. This larger number of hogs would have required feed from an additional 1.1 million acres of cropland and 0.4 million acres of pasture, excluding cropland grazed.

(10) Total egg production was in excess of diet needs in all States except Louisiana, whereas in no State was the average farm-home consumption,

per capita, equal to the diet needs. Total production of poultry meat was in excess of dietary needs in all States except Louisiana. Because of the ease of marketing poultry and eggs, and the need for cash, considerable quantities of those products are diverted from home consumption to the market.

Approximately 44.5 million hens would have been required to produce sufficient eggs to meet farm-diet needs in 1937. This is 15.6 million, or approximately 54 percent, more than was used in 1937 for the production of eggs consumed on farms. Approximately 95.6 million chickens would have been required to provide the farm-diet needs for poultry meat in 1937. This is 29.2 million, or approximately 44 percent, more than was used on farms that year. Such an increase in poultry numbers would have necessitated an increase in the cropland incident to their production from the 2.2 million acres actually used to 3.2 million acres.

(11) It is evident from this study that the rank and file of cotton farmers do not represent a serious market threat as commercial producers of food and feed, if they supply their own needs first.

HOW INFORMATION WAS OBTAINED

The objectives of this survey were (1) to estimate the acreage that would be needed to provide a minimum-adequate diet of farm-grown products for the farm people and to produce feed for workstock, and (2) to estimate the acreage that was used in 1937 for those purposes.

Briefly stated, the approach used involved setting up conservative food-consumption standards for the farm population and then ascertaining the acreage that would be required to produce the food and feed products that could be grown on farms. This acreage estimate was then compared with the estimated acreage used in 1937 for the production of food and feed for farm use.

The comparison provides a basis for a preliminary determination of the extent to which farmers in these States are self-sufficient in the food products they can produce. The estimates arrived at are based on available data and on the judgment of agricultural workers familiar with conditions in their respective States.

The workers in each State were grouped into three committees, namely, the Nutritionist Committee, the Crops Committee, and the Livestock Committee. Because of the wide variations in production conditions, estimates were made by type-of-farming areas. The estimates by States, shown in the tables appended, represent totals or weighted averages of the estimates for the individual type-of-farming areas within each State.

The Nutritionist Committee, composed of home economists and production specialists in each State, considered the dietary needs of the farm population and made recommendations as to the quantities of various foods needed per capita. A level of consumption approximating a minimum-adequate diet was set up. Diets were adapted to each type-of-farming area in a

State in order to conform more closely to the production possibilities of each area. Although total dietary needs were considered by the committees, the products and quantities specified by them referred only to those products that could be produced on farms. Whether or not a product were now being produced in significant quantities usually was made the test of its production possibilities. When a farm product was considered in the diet, it was assumed that the total quantity needed could be produced on farms in the area under consideration.

Studies of dietary requirements made by the Bureau of Home Economics were considered in appraising the total dietary requirements, as well as the several classes of food items in the diet.

The Livestock Committee considered the feed and livestock situation in each of the type-of-farming areas of its State. It estimated the quantities of feed and pasturage normally consumed by each class of livestock, and the normal production from each class of livestock. These estimates were based on present feeding practices. Total feed consumption was limited to the available resources as indicated by census data and the judgment of the committees. Consequently, the rates of feeding and production are not those which would result from recommended feeding practices. Some of the livestock in these States are underfed. The low production per animal reflects those poor feeding practices.

The Crops Committee surveyed the available data and estimated the normal yields of crops in each type-of-farming area. These yield figures were used to convert the quantities of food and feed products to an acreage basis.

The statistical procedure involved building up per capita dietary requirements to total quantities for the entire farm population in each type-of-farming area of the State. The quantities of food crops then were translated into production terms by means of conversion factors, and later to an acreage basis by means of normal crop yields. The statistical procedure used on livestock products included the conversion of livestock food products to a live-weight basis when necessary. Normal rates of production were employed in ascertaining the number of animals required to meet dietary specifications. The rates of feeding, as set by the Livestock Committee, were then applied to these livestock numbers to determine the total quantity of the various feeds needed. Normal yields of crops were used to translate the quantities of feed to an acreage basis.

Estimates of present consumption of farm products on farms were obtained from published reports of the Bureau of Agricultural Economics, or from estimates by the various committees whenever Bureau estimates were not available. The quantities consumed refer to 1935 for direct food crop products and to 1937 for livestock food products. They were converted to an acreage basis by using the same yields of crops and rates of feeding livestock as were used in analyzing the dietary needs.

It should be pointed out that farm self-sufficiency and not State or regional self-sufficiency was considered. That is, farm population instead of total population was used as a basis for estimating aggregate food consumption and needs.

The adequacy of farm diets cannot be learned from this study, for consumption of purchased items was not included in the consumption estimates or needs. No doubt many farm families have adequate diets, because, although they do not produce all the food here considered, they buy the needed commodities.

Because of the nature of this study and the methods used, the results should be considered as preliminary. Most of the data represent estimates. Some difference of opinion occurred between committees in different States as to what constitutes a minimum-adequate diet. Therefore, these estimates do not represent a perfect standard for measuring adequacy of diets, and may need some refining.

The analysis is measured in terms of acreage changes, with yields and farm practices considered as unchanged. Improved farm practices - that is, more efficient use of the land now devoted to food and feed production and the improvement of pastures and more efficient livestock practices - also represent a possibility for increased farm self-sufficiency.

FARM-GROWN FOOD

What is Needed and What is Used

A comparison of the quantities of farm-grown food products needed for a minimum-adequate diet, and the quantities consumed per capita of farm population, is given in table 1, page 16. The State committees of nutrition and production specialists considered the total human dietary needs and the possibilities of providing for those needs by farm production within each type-of-farming area in the State.

The adaptation of dietary needs to the production possibilities in each type-of-farming area may be a source of error, or an occasion for caution in interpreting the State averages. Some minor products are omitted entirely from the diets and a few other minor products are increased beyond present rates of consumption. There are no physical or climatic reasons to prohibit such expansions of production and consumption, but such changes would involve adjustments in farming systems and might weaken unduly the bases of cash income. As some products are not grown in all type-of-farming areas, the State average is a weighted average for each product. Products that were not specified in some areas were either regarded as purchased or compensated by larger specifications of other products, when such substitution would not unbalance the diet.

Reference to table 1 reveals considerable variation in the diet needs that can be farm grown, as well as in present rates of consumption. The food habits of farm people, the production and consumption possibilities, and the procedures followed in estimating, account for most of these variations. It will be noted, however, that the home consumption of farm-grown food products usually is significantly below diet needs. As already indicated, these deficiencies are offset on some farms, at least in part, by purchases. But on many other farms the income situation is such that the farm families do without essential food products unless they are produced at home.

The average situation in respect to the diet needs for and the home consumption of each major product that can be raised on farms in the eight States are presented in the remainder of this section of the report.

Grains

Texas, followed closely by Oklahoma, has the lowest diet requirement for corn meal. Corn is not grown in significant quantities in some parts of these States. Although wheat is significantly grown in some parts of Texas and Oklahoma, no wheat flour was specified because local mills are not generally available for grinding. Although mill service is available in some localities, the scarcity of it accounts for the small present consumption of farm-grown wheat.

The food habits of the farm people to the east of these States favor a larger consumption of corn meal. The committees had various ideas as to how much corn meal could be included in the diet without harmful effects. Consequently, in some States corn meal was held down and larger quantities of flour, either purchased or grown, were specified. Present consumption of farm-produced corn meal is in excess of diet needs in South Carolina, Georgia, and Alabama, about equal in Mississippi, and below diet needs in Louisiana and Arkansas.

Present consumption of farm-grown wheat is highest in South Carolina, but even here less than one-third of the diet need is consumed. In Georgia, present farm-grown consumption is about one-eighth of the diet need. The committees recommended relatively large quantities of wheat in the diets in South Carolina and Georgia because wheat is grown in certain areas and local milling facilities are available. Only in certain areas of South Carolina, Georgia, Oklahoma, and Texas is the present consumption sufficiently large to suggest the possibility of increased production and consumption. Expansion in these areas, to the point of self-sufficiency, is not probable. Because of the general distribution of corn production, the usual adequacy of local grinding facilities, and lower cost, corn meal probably will continue to be the principal cereal grown for home consumption.

Vegetables and Fruits

The quantities of Irish potatoes needed for the diets were in excess of present consumption in all States. In Arkansas, the dietary specification for potatoes was not only the highest, but present consumption was also highest and came nearest to equaling the need. The lowest potato needs were set in Mississippi, and present consumption was 55 percent of the needs. Present consumption was from 42 to 44 percent of needs in South Carolina, Alabama, and Louisiana. The short consuming season - because of storage problems - explains a large part of the low consumption of potatoes. This situation was recognized by the committees.

On the other hand, food habits, production possibilities, and storage practices account for rather generous specifications for sweetpotatoes. Home consumption of sweetpotatoes represented only 27 percent of the needs in South Carolina and 50 percent in Arkansas - two States with low consumption. Consumption was highest in Louisiana; but Alabama, Georgia, and Mississippi followed closely. Consumption in Georgia and Alabama was more than 10 percent in excess of diet needs.

Home consumption of sirup was largest in Mississippi, with Alabama and Georgia following closely. Home consumption was 96 percent of diet needs in Mississippi, 71 percent in Alabama, and 78 percent in Georgia. In most areas where sirup crops are adapted, present consumption of farm-produced sirup represents a large part of the diet requirements. Further increases are possible, particularly in Louisiana and South Carolina and in certain areas of Arkansas, Oklahoma, and Texas.

Estimates of present consumption of minor vegetables and fruits are either unsatisfactory or wholly lacking. The opinion of some committees indicated that consumption of certain types of vegetables was about equal to, or possibly in excess of, diet requirements. Fruit products were thought generally deficient, and production possibilities on a small scale for home consumption were not regarded as favorable except in some fruit areas. Acreage requirements for these crops are not large, and further production and consumption depend largely upon individual initiative and better utilization of present acreages.

Poultry and Eggs

The poultry enterprise is well adapted to small farms because of its small capital requirement, the ease and quickness of production, and the use that can be made of farm-grown and waste feeds. In spite of this favorable situation, egg consumption in South Carolina was only 10.9 dozen per capita, which was about 50 percent of diet needs. On the other hand, egg consumption in Oklahoma, a State of larger farms than South Carolina, was 23.8 dozen. This was in excess of the diet needs as estimated in South Carolina and was 92 percent of the Oklahoma diet estimate.

In all States, excluding Oklahoma and Texas, farming units generally are small, and egg consumption averaged about one-half of diet needs. The consumption of poultry varies less among States than egg consumption, and in general more nearly approaches dietary needs. The need for cash, and the ease with which poultry products can be marketed, diverts a considerable portion of poultry and egg production from consumption on the farm.

Dairy Products

The estimated diet need for milk, inclusive of butter and other dairy products, varied from 85 gallons per capita in Mississippi to 131 gallons in Texas. Home consumption of milk varied from 48.7 gallons in Louisiana to 105.5 gallons in Texas. Home consumption of milk varied from 51 percent of the diet needs in Louisiana to 86 percent in Alabama. The milk used in making butter on farms is included in the home consumption of milk. As a portion of the farm-made butter is sold, actual home consumption is somewhat less than indicated.

Beef

The production and consumption of beef are intimately related to milk production, since most of the cattle are of dairy type and beef is a byproduct. Consumption of farm-slaughtered beef varied from 3.6 pounds (dressed weight) in Mississippi to 10.4 pounds in Louisiana. Even in Texas and Oklahoma, where more of the cattle are of the beef type, home consumption was only slightly above 8 pounds per capita. The data on home consumption of beef are based on estimates of farm slaughter for 1937, converted to a dressed-weight basis. A portion of the farm slaughter is sold as dressed beef, which would reduce actual consumption on farms below the quantities indicated.

The consumption of farm-slaughtered beef is a small factor in farm diets. Some committees kept their diet specifications for beef close to present food habits; other committees specified larger quantities because of the high dietary value of beef. Some beef undoubtedly is bought by farmers and, if paid for from cattle sales, might be regarded as farm-grown beef, although purchasing power might be lost in the exchange. The difficulty of storing beef until it can be consumed is an important factor in the explanation of its present low consumption.

Pork

Consumption of farm-slaughtered pork varied from 50.9 pounds (dressed weight) in Arkansas, to 99.4 pounds in Georgia. These rates of consumption are based on estimates of farm slaughter by the Bureau of Agricultural Economics. The diet needs for pork varied from 68.4 pounds in Oklahoma to 109.5 pounds in Mississippi. Consumption of farm-slaughtered pork was in excess of diet needs in Georgia, about equal in Oklahoma, and about two-thirds of diet needs in the other States. The Nutrition Committees believed that pork represented too large a proportion of the meats in present diets and tried to substitute other meats. Because of the general distribution of hog production and the comparative ease of curing pork, the food habits of farm people probably will continue to favor the consumption of large quantities of pork products.

LIVESTOCK, CROPLAND, AND PASTURE

Quantities Needed and Quantities Used

Livestock Needs

Estimates of the numbers of livestock that would be needed to supply the diet needs of the farm population are given by States in table 2, page 18. The same table also gives for comparison the number required to produce the livestock products consumed on farms in 1937. These estimates assume that no change is needed in numbers of workstock.

The diet specifications for milk, including butter and other dairy products, would require 3,060,000 cows as compared with 2,342,000 cows - the number computed as necessary to produce the milk used on farms in 1937. This 31 percent average increase in cow numbers embraces an increase of 15 percent in Alabama, 20 percent in Arkansas, 21 percent in Oklahoma, 24 percent in Texas, 27 percent in Mississippi, 34 percent in Georgia, 79 percent in South Carolina, and 95 percent in Louisiana. The indicated changes in cow numbers reflect differences between States, both in diet needs and present consumption.

Two procedures were used in the treatment of cattle other than cows. The numbers of "other cattle" for South Carolina, Georgia, and Alabama are the normal numbers associated with the cow herds. The production of beef is in excess of diet requirements, but follows incidentally from the production of milk. In the other States, the number of "other cattle" is determined by the needs and present consumption of beef.

The diet needs for pork products would require 6,430,000 hogs as compared with 4,913,000, the number computed as used for home consumption in 1937, or an increase of 31 percent. The number of hogs required for diet needs was 25 percent less than the estimated actual farm slaughter in Georgia, and was exactly equal to the farm slaughter in Oklahoma. This ranged upward in the other States to a needed increase of 80 percent over farm slaughter in Mississippi, if diet requirements are to be met. These increases in hog numbers are, of course, influenced by variations from State to State in both diet specifications and present consumption.

Production of eggs sufficient for diet needs would require 44.5 million hens, as compared with the 28.9 million that were computed as necessary to produce the eggs used in homes in 1937, or an increase of 54 percent. Present egg consumption was highest in Oklahoma and Texas and the smallest increases were necessary to supply the diet needs in those States. The greatest increases were necessary in Louisiana, Arkansas, and Mississippi. The dire need for cash by many small farmers diverts many eggs from home consumption into market channels.

Estimates of diet needs for poultry meat would require 95.6 million chickens, as compared with the 66.4 million head consumed on farms in 1937, an increase of 44 percent. The smallest increases were necessary in South Carolina, Georgia, and Mississippi. The greatest increases were needed in Louisiana, Oklahoma, and Arkansas. The need for cash also causes many chickens to be sold, instead of used for home consumption.

Total Acreage Required

The acreages of cropland and pasture that would be needed to supply the diet needs of the farm population for direct food and for livestock products is estimated by States in table 3, page 19. These acreages are also compared with the area required to produce the products consumed in 1937.

The direct food crops used in 1937 required 3.2 million acres of cropland, whereas 5.5 million acres of cropland would have been required to provide the quantities of these products specified in the diets. Because a large part of the livestock production comes from pasturage, farm self-sufficiency in food crops would require a greater proportionate increase of cropland than would the production of livestock products.

Comparisons between States should not be regarded with exactitude. Largely because the committees in Alabama believed that a minimum-adequate diet should contain less corn meal and less of certain classes of vegetables than are now being consumed, the direct food crops specified in the diet prescribed by those committees would require 1 percent less acreage than was used in 1937. The diet needs for these food crops would require an increase from their use in 1937 of 46 percent in Georgia, 60 percent in South Carolina, 70 percent in Mississippi, 140 percent in Louisiana, 146 percent in Arkansas, 34 percent in Oklahoma, and 226 percent in Texas. Although these relationships suggest that farm people in the southeastern States may be more self-sufficient than in the other States, so far as direct food crops are concerned, differing methods of making diet estimates and the lack of certain data on present consumption may have resulted in wider estimated differences between States than actually prevailed.

The 4,386,000 head of horses and mules consumed feed from 15.4 million acres of cropland and from 12.5 million acres of open and woodland pasture. The cropland used represented 28.6 percent of the total available cropland, and was 55.4 percent of the cropland growing food and feed for consumption on the farm. Feeding of workstock requires the use of more cropland than the combination of all livestock enterprises whose products are consumed on the farm. The use of land by other livestock, whose products are sold, would reduce the cropland used by workstock to a subordinate, though highly significant, proportion. The acreage of cropland per head of workstock varies only slightly from State to State, except in Oklahoma and Texas, where more pasture was grazed.

The condition of many horses and mules is found unsatisfactory for good farm work. Any increase in the production of feed crops will probably result in somewhat better feeding of workstock.

About 17.9 million acres of land were computed as being used by cattle in producing milk and beef for home consumption in 1937. The cropland whose products were consumed by cattle was 22.1 percent of the cropland used for food and feed production, excluding horses and mules. Pastures represented 85 percent of all land used by cattle. Cattle used about 52 percent and horses and mules about 43 percent of the total pasture acreage. The allocation of 6.5 acres of pasture per cow, including other stock, indicates the importance of pasture resources in maintaining cattle. The inclusion of large acreages of woodland pasture, where the amount of grazing is questionable, however, probably exaggerates the real use of pasture resources. The allocation of only 1.2 acres of cropland per cow, including other cattle, for grain and roughage production indicates the low level of feeding rations. This is especially true when the low yields of feed crops common to this region are considered.

If the consumption of milk and beef were increased to diet specifications, the land used by cattle would have to be expanded to 26.9 million acres, or 50 percent. The cropland used by cattle would be increased from 2.8 percent of the total available cropland to 4.2 percent. Present pasture resources are being fully employed, it is believed. The indicated increase in cattle numbers and in the land necessary for their maintenance under present practices is probably too much to expect, without too great an encroachment on necessary cash crops. The improvement of pastures and higher yields for feed crops are more likely to be the bases for increased cattle production than is a shift of cropland from cash-crop to feed-crop uses.

About 4.3 million acres of cropland were calculated as used in producing farm-slaughtered hogs in 1937. This is 35 percent of the cropland that was used for farm food and feed consumption, exclusive of that for horses and mules. The pasture acreage for hogs, exclusive of grazing on cropland, was about 4 percent of the pasture used by all livestock. If the needed pork products were to be supplied, about 5.4 million acres of cropland would be required. In that event, cropland used by hogs produced for home use would represent 5.6 percent of the available cropland for all purposes, instead of 4.5 percent as in 1937. The use of additional cropland in raising hogs for home consumption would encroach significantly upon crop acreage now used to produce crop and livestock products for sale. This encroachment would meet its greatest resistance in areas where the cropland per capita is very limited, unless the shortage of cropland were compensated by high yields of feed crops.

About 2.2 million acres of cropland were calculated as used in growing grain to produce poultry products consumed on farms in 1937, or 1.7 percent of the cropland used for farm food and feed consumption, exclusive of horses and mules. The cropland used for poultry would have to be increased to 3.2 million acres, or 47 percent, to supply diet needs. Although poultry uses less cropland than other livestock, poultry production is affected by the competition for land, and large quantities of poultry feeds are purchased.

The production of sheep and goats is a very minor enterprise in most parts of the southern region and consideration of it was omitted except in Mississippi and Texas.

Acreage Increases Needed

Of the 97.3 million acres of cropland in these eight Southern States in 1935, about 27.8 million acres, or 28.6 percent, were computed as used for food and feed crops for consumption on the farm in 1937. If the specified minimum-adequate diets were produced, the cropland used for food and feed crops would be increased to 33.6 million acres, or 34.5

percent of the cropland. In addition to this use of cropland, open and woodland pasture acreages would have to be increased from the 29 million acres used in 1937 in the production of farm-consumed goods to 37.7 million acres.

The proportion of total cropland that was devoted to food and feed crops in 1937 and that which would be necessary to supply the diets vary significantly from State to State. In Oklahoma, only 17.6 percent of the cropland was used for food and feed crops in 1937, but in Alabama this proportion was 43.4 percent. The other States fall between these extremes. An additional shift of 2.6 percent of the cropland in Oklahoma and 3.8 percent in Alabama to food and feed production would be necessary to supply the diets. To supply the food and feed specifications in the other States would require a shift of 13.8 percent of the cropland in Mississippi, 12.1 percent in Louisiana, 10.8 percent in South Carolina, 10.0 percent in Arkansas, 4.9 percent in Texas, and 2.7 percent in Georgia. The above increases in acreages of cropland needed to supply the diets are influenced by State differences in the diet specifications that can be farm grown, by the rates of feeding livestock, and by crop yields.

The acreage per person of all available cropland, the quantity used for home consumption, and the quantity needed for adequate diets are given in table 4, page 21. This table also shows the percentage increase in acreage over present home use that would be needed for minimum-adequate diets.

The number of people in relation to the available land affects the amount of land that can be used for farm self-sufficiency. In Oklahoma, the cropland per person was 16.8 acres, of which 3.1 acres were used in 1937 and 3.5 acres were estimated as needed for food and feed. In Alabama, there were only 6 acres of cropland per capita, of which 2.6 acres were used in 1937 and 2.8 acres were needed for food and feed. In parts of Texas, as in Oklahoma, large-scale extensive types of farming utilize much less labor than do cotton types of farms in other States. Consequently, crop acreages per capita are larger. Crop acreages per capita are lowest in Louisiana, South Carolina, and Mississippi. The small volume of cash-crop production from the low per capita acreages does not have a high value even when prices are reasonably good, and the much lower value when prices are low makes it difficult to shift too much land from cash crops to the production of food and feed.

Production of direct food crops for minimum-adequate diets, together with feed for the necessary livestock and workstock, would require an increase of 23 percent in cropland for grain, 11 percent for roughage, and 30 percent in pasture. The increase of 5.8 million acres of cropland is equivalent to 5.9 percent of the total available cropland. If a shift of this magnitude were made from cash-crop production to additional food and feed production, a commensurate increase in crop and livestock food products might not result, because part of the more abundant feed supplies possibly would be utilized by workstock without any increase in production, except as a consequence of better farm work. It is also possible that part of the increased production would be diverted to market channels.

How Needs for Livestock Feed Were Estimated

The normal annual feed consumption and production rates for livestock are given in table 5, page 22. These estimates are based upon present feeding practices. The Livestock Committees made estimates for each class of livestock in each type-of-farming area. The rates of consumption were determined so that total feed consumption and feed resources were substantially in balance. Purchased feeds, such as corn, oats, and hay, which could have been grown, are included as farm-grown feeds. Protein and other supplementary feeds, usually bought, are in addition to the rates as indicated. Pasture resources, excepting free range, were also distributed to each class of livestock. Although estimates were made by type-of-farming areas, only the weighted averages are shown. It follows that some feeds that are important in specific areas appear rather insignificant in State averages.

The grain consumption by horses and mules in Oklahoma and Texas appears to be low, but is offset by a greater use of pasture, a larger proportion of young and saddle stock, and longer periods of idleness in some areas, because of the uneven seasonal distribution of horse work. Grain consumption in Louisiana is high because of the heavy-feeding practices in the cotton and sugarcane areas of the Delta. The rates in the other States are rather similar and reflect existing differences in the feed situation. Many of the workstock are poorly fed and are scarcely in condition to do good farm work. Feeding rates in different areas of a State often vary more than rates between States.

As previously indicated, two methods were used in expressing the feeding rates for cattle. In South Carolina, Georgia, and Alabama, the cattle enterprise was considered as a unit producing both milk and beef. Milk was regarded for first consideration. Feeding rates are related to cow numbers, but they include the feed for other cattle also. The freshening milk cows bring young stock that must be fed or disposed of in some way. Much of the beef comes from discarded milk cows and many of the heifers are advanced to the cow herd. Most of the cattle are of the dairy type and very little grain and hay are fed to the young stock to condition them for market.

The situation is little different in many parts of Mississippi, Louisiana, Arkansas, Oklahoma, and Texas, but in these States separate feeding rates were estimated for dairy cows and for other cattle. The production rates for milk are State averages of normal production in each type-of-farming area. The production rates for beef are the normal rates per cow or per head of other cattle.

The feeding rates for hogs are based on live weights as indicated for production. The production per hog in South Carolina, Georgia, and Alabama is for hogs slaughtered for home use, since hogs sold are of lighter weight. The production per hog in the other States relates to all hogs, including sows, that were on farms January 1. As the weight of slaughtered hogs is above this estimate of production, the feeding rate per head would be increased accordingly for hogs slaughtered specifically for home use. In estimating the rate of feeding the harvested or grazed crops, consideration was given to the importance of waste feeds, including mast and other resources from the woods.

The feeding rates for poultry are given separately for hens kept for eggs, and for chickens raised for meat. Waste feeds on the farm and purchased feeds are in addition to the quantities indicated.

The normal yield of crops is given in table 6, page 24. These yields are based upon available statistical data and the judgment of committees. The reports of the State committees with respect to diets, rates of feeding livestock, and crop yields, are translated into State totals of livestock numbers and crop acreages in tables 2, 3, and 4.

FOOD USED AND POTENTIAL PRODUCTION

The total production of milk, including the quantity sold, is insufficient to supply the farm-diet needs in South Carolina, Georgia, and Louisiana (table 1 and table 7). Total egg production is insufficient only in Louisiana. Beef production is far in excess of needs in all States. Pork production is below needs only in Mississippi. Poultry-meat production is below needs in Louisiana only. In other States, the excess of present production over diet needs is very slight.

Table 7, page 25, also shows the proportion of the total production of other livestock products that were used on farms in 1937. Significant proportions of present production are now a source of cash income. Any increase in the production of livestock products probably will be divided between home use and sales. The proportion of the increase to be sold probably will be greater on farms where livestock are now kept, than on farms where livestock would be a new enterprise.

It is evident from this average situation of insufficient food production in relation to needs that southern farmers generally have a long way to go in filling their own larders before they become an important competitive factor in the food and feed markets of the country. Exceptions to this are the areas that have specialized in the production of livestock and livestock products, and truck crops, fruits, and other food crops that normally enter into commercial channels. But these specialized areas occupy a relatively small place in the present farm economy of the southern region.

The adjustment programs of the Agricultural Adjustment Administration have presented an opportunity for the increased production of food and feed for home use on southern farms. From 1937 to 1938, for example, the harvested cotton acreage in the States studied was decreased by 7.5 million acres, largely by reason of the adjustment programs. A full and balanced use of the land so released for the production of farm food and feed in these States would have been more than sufficient to supply the deficiencies indicated for 1937. The extent to which this land was used for the production of home-consumption items is not definitely known, but it was probably large.

LIMITATIONS OF STUDY AND NEED FOR FUTURE WORK

This study was conducted to obtain (1) a preliminary or over-all estimate of the land being used for the production of farm-grown commodities for consumption by farm people and farm workstock; and (2) an estimate of the acreage that would be needed to provide the farm-grown products needed for a minimum-adequate diet for the farm population and feed for the workstock. It does not, therefore, represent a complete and thoroughgoing analysis of farm self-sufficiency in the South. Rather, it presents a preliminary appraisal or inventory of the existing situation in relation to direct needs.

The study indicates the need for fuller consideration of the problem, if farm self-sufficiency is to be viewed in proper perspective. The following two major points need more comprehensive consideration:

(1) The food-consumption habits of the various segments of the farm population, which would involve a consideration of both farm-produced and purchased foods. Only when such information is available is it possible to learn the degree of adequacy of present diets. The acquisition of this information should be a first step in any complete analysis of farm self-sufficiency. This phase of the work is in the field of the home economist, but should be incorporated as a part of a comprehensive study of the economics of farm self-sufficiency.

(2) The alternative production opportunities and the physical, economic, and institutional limitations to increases in farm food and feed production for various segments of the farm population. These farm-population segments include farm owner-operators, share tenants, sharecroppers, other types of tenants, and farm laborers.

This consideration would involve an evaluation of the economy of farm self-sufficiency. That is, to what extent does it pay farm families to be self-sufficient? A study of alternative enterprises and combinations of enterprises would lead to decisions regarding the economic desirability of producing, or of purchasing, farm food and feed.

Concentrated study and analysis are needed with respect to the impediments to increased food and feed production, such as need for cash, farm tenancy, lack of storage facilities, lack of knowledge of diet needs, and customs and habits.

A complete and thoroughgoing analysis of farm self-sufficiency designed to answer the above points is not the work of any one group of specialists, but requires the joint effort and participation of farm economists, home economists, crop and livestock specialists, and farmers.

Table 1.- Quantities of farm-grown food products needed for a minimum-adequate diet, compared with quantities consumed per capita of the farm population 1/

Item	Unit	South Carolina		Georgia		Alabama		Mississippi	
		Farm-grown diet needs	Home consumption	Farm-grown diet needs	Home consumption	Farm-grown diet needs	Home consumption	Farm-grown diet needs	Home consumption
Corn meal	Pound	77.6	100.0	110.7	130.0	100.0	180.0	2/120.0	125.0
Wheat flour	do	75.5	21.3	65.1	8.0	-	.7	-	-
Rice	do	-	-	.5	-	-	-	-	-
Potatoes	do	60.0	25.5	58.2	30.6	97.4	40.8	56.0	30.6
Sweetpotatoes ...	do	160.0	43.9	126.8	145.3	128.3	148.7	152.0	142.0
Peanuts	do	3.3	1.7	3.3	4.7	2.8	5.7	2.0	2.6
Other nuts	do	3.8	-	5.8	-	4.2	-	-	-
Dried beans and peas	do	17.8	-	15.9	-	18.0	-	45.0	-
Sirup	do	29.7	6.8	35.0	27.4	40.0	28.5	34.2	33.0
Tomatoes	do	95.0	-	95.0	-	95.0	-	3/	-
Gardens	Acre	.12	-	.10	-	.11	-	.10	-
Orchards	do	3/	-	3/	-	3/	-	.10	-
Milk	Gallon	95.0	49.2	95.0	67.5	95.0	81.6	85.0	66.6
Eggs	Dozen	20.0	10.9	20.0	11.5	20.0	14.4	21.0	13.1
Beef, D.W.	Pound	10.0	4.7	10.0	8.5	10.0	4.0	26.1	3.6
Pork, D.W.	do	78.4	55.3	76.0	99.4	76.3	52.4	109.5	60.8
Poultry, D.W. ...	do	13.1	11.6	13.5	10.7	13.8	9.7	16.4	13.1
Mutton	do	-	-	-	-	-	-	1.5	-
Fish and game ...	do	6.3	4/	5.5	4/	4.7	4/	6.5	4/
Total meat ...	do	107.8	71.6	105.0	118.6	104.8	65.1	160.0	77.5

Continued

Table 1.- Quantities of farm-grown food products needed for a minimum-adequate diet, compared with quantities consumed per capita of the farm population 1/ - Continued

Item	Unit	Louisiana		Arkansas		Oklahoma		Texas	
		Farm-grown diet needs	Home consumption	Farm-grown diet needs	Home consumption	Farm-grown diet needs	Home consumption	Farm-grown diet needs	Home consumption
Corn meal	Pound	120.0	40.0	150.0	70.0	57.0	45.0	50.0	40.0
Wheat flour	do	-	-	-	2.2	-	15.2	-	3.7
Rice	do	23.0	-	-	-	-	-	-	-
Potatoes	do	93.0	40.8	134.0	107.1	3/	81.6	3/	35.7
Sweetpotatoes	do	168.0	162.2	114.0	57.5	3/	23.7	3/	43.9
Peanuts	do	-	2.5	-	1.4	-	1.9	-	1.3
Other nuts	do	-	-	-	-	-	-	-	-
Dried beans and peas	do	15.0	-	20.0	-	3/	-	3/	-
Sirup	do	45.6	18.2	27.8	4.9	12.3	1.1	5.0	5.7
Tomatoes	do	3/	-	3/	-	3/	-	3/	-
Gardens	Acre	.10	-	.10	-	.10	-	.21	-
Orchards	do	.08	-	.10	-	.05	-	.23	-
Milk	Gallon	95.0	48.7	100.0	83.6	125.0	103.2	131.0	105.5
Eggs	Dozen	30.0	12.8	25.0	17.0	26.0	23.8	31.0	23.3
Beef, D.W.	Pound	34.3	10.4	28.5	5.2	30.2	8.8	47.2	8.5
Pork, D.W.	do	75.3	51.2	85.0	50.9	68.4	68.7	92.3	66.7
Poultry, D.W.	do	33.1	12.9	23.2	15.2	31.4	19.9	19.3	14.0
Mutton	do	-	-	-	-	-	-	4.6	-
Fish and game	do	14.3	4/	9.0	4/	-	4/	-	4/
Total meat ...	do	157.0	74.5	145.7	71.3	130.0	97.4	163.4	89.2

1/ Diet needs are estimates of State committees. Home-consumption quantities are conversions from 1935 crop estimates and 1937 livestock estimates by the Bureau of Agricultural Economics.

2/ In addition, 98 pounds of "roasting ears" were used.

3/ Produced on garden acreage.

4/ No fish and game reported for home consumption.

Table 2.- Numbers of livestock needed to provide the 1937 farm population with a minimum-adequate diet of livestock products compared with the number required to produce the livestock products consumed in 1937, by States

Item	South Carolina		Georgia		Alabama		Mississippi		Louisiana	
	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937
	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head
Workstock	219	219	387	387	392	392	419	419	320	320
Dairy cows	233	130	437	325	379	329	381	299	236	121
Other cattle ..	175	98	376	279	326	283	369	50	310	94
Hogs	439	327	685	916	614	447	1,308	726	628	427
Sheep	-	-	-	-	-	-	88	6	-	-
Hens for eggs .	3,468	2,291	5,453	3,390	5,065	3,754	5,796	3,313	4,884	1,900
Chickens for meat	6,500	6,030	10,379	8,372	9,993	7,466	9,946	7,947	11,761	4,577

Item	Arkansas		Oklahoma		Texas		Total	
	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937
	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head	1,000 head
Workstock	432	432	641	641	1,576	1,576	4,386	4,386
Dairy cows	301	251	292	241	801	646	3,060	2,342
Other cattle ..	308	57	190	56	594	106	2,648	1,123
Hogs	662	396	551	553	1,543	1,121	6,430	4,913
Sheep	-	-	-	-	275	76	-	-
Hens for eggs .	6,055	3,313	4,408	3,382	9,393	7,595	44,522	28,938
Chickens for meat	10,825	7,062	13,682	8,662	22,508	16,314	95,594	66,430

Table 3.- Acreage needed to provide the 1937 farm population with specified diets of farm-grown products and acreage required to produce the products consumed in 1937, including the acreage required to feed horses and mules, by States

Item	South Carolina		Georgia		Alabama		Mississippi		Louisiana	
	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Direct food crops 1/	559	350	916	628	585	692	871	512	423	175
Horses & mules:										
Grain	756	756	1,361	1,361	1,434	1,434	1,098	1,098	1,120	1,120
Roughage	150	150	283	283	329	329	422	422	225	225
Pasture	184	184	430	430	463	463	922	922	597	597
Total	1,090	1,090	2,074	2,074	2,226	2,226	2,442	2,442	1,942	1,942
Cattle (milk & beef):										
Grain	227	126	215	161	260	222	120	81	61	32
Roughage	172	96	185	130	137	119	113	66	75	35
Pasture	2,192	1,224	4,024	2,995	3,224	2,798	2,788	1,333	1,012	417
Total	2,591	1,446	4,424	3,285	3,621	3,139	3,021	1,480	1,148	484
Sheep:										
Pasture	-	-	-	-	-	-	146	10	-	-
Hogs:										
Grain	405	301	769	1,034	727	550	1,066	591	320	217
Pasture	53	39	171	229	110	80	530	294	85	56
Total	458	340	940	1,263	837	630	1,596	885	405	273
Poultry:										
Grain	252	168	417	259	373	282	370	233	260	102
All uses:										
Grain	2,199	1,701	3,678	3,443	3,479	3,180	3,525	2,515	2,184	1,647
Roughage	322	246	468	413	466	448	535	488	300	260
Pasture	2,429	1,447	4,625	3,654	3,797	3,341	4,386	2,559	1,694	1,070
Total	4,950	3,394	8,771	7,510	7,742	6,968	8,446	5,562	4,178	2,977

Continued

Table 3.- Acreage needed to provide the 1937 farm population with specified diets of farm-grown products and acreage required to produce the products consumed in 1937, including the acreage required to feed horses and mules, by States - Continued

Item	Arkansas		Oklahoma		Texas		Total	
	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937	Needed for diets	Used in 1937
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres	1,000 acres
Direct food crops 1/	656	267	234	174	1,154	354	5,498	3,153
Horses & mules:								
Grain	1,218	1,218	1,130	1,130	3,422	3,422	11,539	11,539
Roughage	581	581	418	418	1,475	1,475	3,883	3,883
Pasture	937	937	3,390	3,390	5,538	5,538	12,461	12,461
Total	2,736	2,736	4,938	4,938	10,435	10,435	27,883	27,883
Cattle (milk & beef):								
Grain	246	181	448	250	513	279	2,090	1,332
Roughage	293	211	313	225	712	536	2,000	1,418
Pasture	1,737	1,174	2,135	1,399	5,684	3,823	22,796	15,163
Total	2,276	1,566	2,896	1,874	6,909	4,638	26,886	17,913
Sheep:								
Pasture	-	-	-	-	702	193	848	203
Hogs:								
Grain	436	261	547	552	1,153	837	5,423	4,343
Pasture	165	99	49	55	481	349	1,644	1,201
Total	601	360	596	607	1,634	1,186	7,067	5,544
Poultry:								
Grain	222	141	365	259	924	713	3,183	2,157
All uses:								
Grain	2,778	2,068	2,724	2,365	7,166	5,605	27,733	22,524
Roughage	874	792	731	643	2,187	2,011	5,883	5,301
Pasture	2,839	2,210	5,574	4,844	12,405	9,903	37,749	29,028
Total	6,491	5,070	9,029	7,852	21,758	17,519	71,365	56,853

1/ Based upon BAE consumption estimates for 1935 and upon estimates by State committees.

Table 4.- Acreage per person of available cropland, used for home consumption in 1937 compared with amount necessary for diet needs, and ratio of acreage needed for diets to 1937 use, by States

Item	Southeast				South Central				Southwest			Regional average
	S.C.	Ga.	Ala.	Average	Miss.	La.	Ark.	Average	Okla.	Tex.	Average	
	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres	Acres
Acres per capita:												
Crop land:												
Total (1935)	5.6	7.7	6.0	6.5	5.7	5.5	6.7	6.0	16.8	15.2	15.7	9.3
Used in 1937	2.0	2.7	2.6	2.5	2.2	2.2	2.5	2.3	3.1	3.3	3.3	2.6
Needed for diets	2.6	2.9	2.8	2.8	3.0	2.9	3.1	3.0	3.5	4.1	3.9	3.2
Pasture land:												
Total (1935)	2.2	5.9	3.6	4.1	4.9	3.3	4.1	4.2	15.9	42.2	34.2	13.8
Used in 1937	1.5	2.5	2.4	2.2	1.9	1.2	1.9	1.7	4.9	4.3	4.5	2.8
Needed for diets	2.5	3.2	2.7	2.8	3.2	1.9	2.4	2.6	5.7	5.5	5.5	3.6
Total crop and pasture:												
Total (1935)	7.8	13.6	9.6	10.6	10.6	8.8	10.8	10.2	32.7	57.4	49.9	23.1
Used in 1937	3.5	5.2	5.0	4.7	4.1	3.4	4.4	4.0	8.0	7.6	7.8	5.4
Needed for diets	5.1	6.1	5.5	5.6	6.2	4.8	5.5	5.6	9.2	9.6	9.4	6.8
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Ratio of acreage required for needs to 1937 use:												
Grain	129	107	109	112	140	133	134	136	115	128	124	123
Roughage	131	113	104	113	110	115	110	111	114	109	110	111
Pastur	168	127	114	128	171	158	128	153	115	125	122	130
Total	146	117	111	120	152	140	128	140	115	124	121	125

Table 5.- Normal annual feed consumption and production rates for livestock 1/

Item	Unit	South Carolina	Georgia	Alabama	Missis-sippi	Louisi-ana	Arkansas	Oklahoma	Texas
Horses and mules				Per head of all horses and mules					
Corn	Bushel	34.6	37.2	41.2	39.5	53.5	42.1	14.8	26.0
Oats	do	22.6	5.8	.1	-	1.7	5.0	17.6	4.4
Rice	do	-	-	-	-	.7	-	-	-
Grain sorghum	do	-	-	-	-	-	-	2.3	9.4
Roughage	Ton	1.3	1.5	1.4	1.2	1.0	1.5	.9	1.2
Pasture	Acre	.8	1.1	1.2	2.2	1.9	2.2	5.3	3.5
Cattle									
Dairy cows		Per cow(incl.other cattle)					Per dairy cow		
Corn	Bushel	8.0	5.5	8.4	3.7	4.4	10.0	11.8	2.9
Oats	do	9.3	.3	.2	-	-	1.1	10.9	4.2
Wheat	do	-	-	-	-	-	-	.6	-
Grain sorghum	do	-	-	-	-	-	-	2.1	1.2
Roughage	Ton	1.38	.82	.62	.24	.36	.91	1.20	.96
Pasture	Acre	9.4	9.2	8.5	3.9	2.2	4.4	5.0	5.6
Production:									
Milk	Gallon	373	307	335	304	348	388	421	372
Beef, L.W.	Pound	288	198	243					
Other cattle		(Pro rata to cows-above)				Per head of other cattle			
Corn	Bushel				.8	-	2.0	3.3	4.8
Oats	do				-	-	-	1.5	.2
Grain sorghum	do				-	-	-	.2	1.0
Roughage	Ton				.11	.05	.18	.47	.18
Pasture	Acre				3.6	1.6	1.4	3.5	2.1
Production:									
Beef, L.W.	Pound				184	191	200	300	362
Sheep		(Insignificant)				Per ewe (incl. other sheep)			
Pasture	Acre				1.7	-	-	-	2.6
Production:									
Mutton, L.W.	Pound				45.0	-	-	-	75.0

Continued

Table 5.- Normal annual feed consumption and production rates for livestock 1/ - Continued

Item	Unit	South Carolina	Georgia	Alabama	Mississippi	Louisiana	Arkansas	Oklahoma	Texas
Hogs		Per head for home use				Per head of all hogs			
Corn	Bushel	12.7	10.4	13.4	12.2	5.8	10.5	11.2	9.5
Oats	do	-	-	-	-	1.0	-	1.1	.2
Rice	do	-	-	-	-	.4	-	-	-
Wheat	do	-	-	-	-	-	-	.8	.1
Barley	do	-	-	-	-	-	-	1.0	-
Grain sorghum	do	-	-	-	-	-	-	1.9	2.8
Peanuts	do	-	5.5	2.3	-	.5	-	-	-
Sweetpotatoes	do	-	.7	1.4	-	.8	-	-	-
Pasture	Acre	.12	.25	.18	.4	.13	.25	.10	.30
Production, L.W.	Pound	241	232	246	154	148	200	169	180
Hens (for eggs)					Per hen				
Corn	Bushel	.40	.40	.40	.71	.35	.44	.29	.61
Oats	do	-	-	-	-	-	-	.12	.28
Rice	do	-	-	-	-	.06	-	-	-
Wheat	do	-	-	-	-	-	-	.22	-
Grain sorghum	do	-	-	-	-	-	-	.05	.14
Barley	do	-	-	-	-	-	-	.03	-
Production	Dozen	4.6	5.0	5.4	5.41	5.83	5.23	6.9	7.0
Chickens (for meat)					Per head				
Corn	Bushel	.17	.19	.20	.14	.17	.08	.07	.20
Oats	do	-	-	-	-	-	-	.03	.06
Rice	do	-	-	-	-	.04	-	-	-
Wheat	do	-	-	-	-	-	-	.06	-
Grain sorghum	do	-	-	-	-	-	-	.02	.04
Barley	do	-	-	-	-	-	-	.01	-
Production, L.W.	Pound	2.75	2.75	2.75	3.0	3.25	3.33	3.0	2.6

1/ Based on estimates of State committees.

Table 6.- Normal yield of crops

Item	Unit	South Carolina	Georgia	Alabama	Mississippi	Louisiana	Arkansas	Oklahoma	Texas
Corn	Bushel	13.8	11.5	12.0	15.0	15.5	16.3	16.7	16.8
Wheat	do	10.6	9.8	-	-	-	-	13.2	10.4
Rice	do	-	12.0	-	-	40.9	-	-	-
Oats	do	24.0	21.4	21.0	-	40.0	17.5	26.0	28.7
Grain sorghum	do	-	-	-	-	-	-	11.2	17.9
Barley	do	-	-	-	-	-	-	17.9	-
Hays	Ton	1/ 1.9	1/ 2.0	1/ 1.7	1.2	1.4	1.1	1.4	1.3
Potatoes	Bushel	110.4	57.6	71.0	74.2	77.4	73.0	-	-
Sweetpotatoes	do	95.0	83.5	88.4	91.0	83.7	75.7	-	-
Dried beans and peas ...	do	5.5	5.5	5.0	7.5	8.0	7.5	-	-
Peanuts	do	20.0	22.2	15.9	16.8	16.0	-	-	-
Sirup	Gallon	62.4	84.5	78.6	69.5	233.0	49.7	46.0	129.0
Tomatoes	Bushel	84.9	84.9	94.3	2/	2/	2/	2/	2/

1/ Includes hay and other roughages per acre in hay.

2/ Included in garden.

Table 7.- Total production per person of livestock products in 1937 and proportion of production used in homes, by States

Item	Unit	South Carolina	Georgia	Alabama	Mississippi	Louisiana	Arkansas	Oklahoma	Texas
Production per capita, 1937:									
Beef, D.W.	Pound	34	37	48	71	87	81	276	294
Pork, D.W.	do	88	144	89	94	121	117	141	128
Poultry, D.W.	do	16	14	15	19	18	33	32	23
Milk	Gallon	69	91	101	117	80	132	276	212
Eggs	Dozen	22	30	30	29	27	39	74	73
Proportion of production used in homes:									
Beef	Percent	14	23	8	5	12	6	3	3
Pork	do	63	69	59	65	43	43	49	52
Poultry	do	73	76	67	71	70	46	62	61
Milk	do	71	74	80	57	60	64	37	50
Eggs	do	48	38	47	46	48	43	32	32